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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,396	02/28/2002	David B. Wallace	D4865-00004	8099

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EXAMINER	
HARTMAN JR, RONALD D	

ART UNIT	PAPER NUMBER
2121	

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/085,396	WALLACE, DAVID B.	
	Examiner	Art Unit	
	Ronald D Hartman Jr.	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) *1-16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/15/02,11/12/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 1-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in a telephone voice mail left to the examiner of record on September 9, 2004 by the attorney of record, Mr. Samuel W. Apicelli, which was made **with traverse**. ~~For the applicant's convenience, the particulars of the Restriction Requirement are addressed further below.~~

The application was restricted to one of the following inventions (groups):

Group I, Claims 1-16, being directed towards to a system for remotely monitoring the amount of material at a location, classified in class 702, subclass 188; and

Group II, Claims 17-21, being directed towards a method for maintaining sufficient quantities of raw materials by ordering and transporting materials to a manufacturing site before the materials on hand are depleted, classified in class 705, subclass 28.

~~As previously noted above~~, Mr. Samuel W. Apicelli chose group II, **with traverse**, and therefore, an action on the merits of claims 17-21 appears below, and claims 1-17 should be ~~canceled~~ in response to this office action as they are now directed towards a non elected invention.

Claim Objections

2. Claim 18, line 2, should have "existing" inserted in between the words "determined" and "material".

Claim 21 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. As per claim 21, all of the limitations and or features of pending claim 21 have already been set forth by pending claim 17 since the second signal, as claimed by way of claim 17, is sent from the remote site where the container is, to a central computer

and therefore, as currently presented, claim 21 does not add any further limitations to the system set forth by pending claim 17.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.32(c) may be used to overcome an actual or provisional rejection on a nonstatutory double patenting rejection provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.37(b). The following quotations are used in support of the examiner's holding of Double Patenting:

"Claim 12 and Claim 13 are generic to the species of invention covered by claim 3 of the patent. Thus, the generic invention is "anticipated" by the species of the patented invention. Cf., Titanium Metals Corp. V. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985)(holding that an earlier species disclosure in the prior art defeats and generic claim). This courts predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic application. In re Van Ornum, 686 F.2d 937, 944, 214 USPQ 761 (CCPA 1982); Schneller, 397 F.2d at 354. Accordingly, absent a terminal disclaimer, claims 12 and 13 were properly rejected under the doctrine of obviousness-type double patenting." (In re Goodman (CA FC) 29 USPQ2d 2010 (12/3/1993)).

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or anticipated by, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998)(affirming a holding of obviousness-type double patenting

where a patent application claim to a genus is anticipated by a patent claim to a species within that genus)."(Eli Lilly and Company V Barr Laboratories, Inc., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (decided: May 30, 2001)

Claims 17-21 are rejected under the judicially created doctrine of double patenting over claims 12-16 of U. S. Patent No. 6,366,829 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

Claim 17 of the instant application is anticipated by patented claim 12 in that claim 12 of the patent contains all of the limitations of claim 17 of the instant application. Claim 17 of the instant application therefore is not patentably distinct from the earlier patented claim 12 and as such is unpatentable for obvious-type double patenting. In other words, pending claim 17 is generic to the species of the invention covered by claim 12 of the patent.

Claims 18-21 claim the same subject matter as claimed by way of patented claims 13-16 of U.S. Patent No. 6,366,829.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferretti et al., U.S. Patent No. 4,788,648, in view of Duenas, U.S. Patent No. 6,336,362.

As per claims 17 and 21, Ferretti teaches a method comprising:

- generating a first signal representative of an existing quantity of raw material at the remote site (i.e. the generation of an analog signal representing pressure, C3 L55);
- transmitting a second signal corresponding to the first signal, from the remote site to at least one of a local computer and a central computer, at predetermined time intervals (i.e. conditioning the signal and changing the analog signal into a digital signal, C3 L55-58, and

sending the digital signal to a remote display at a remote location, C4 L40-42, wherein the remote location may interrogate the remote system over predetermined time windows, C3 L35-38 and C6 L66- C7 L14);

- determining the existing quantity of raw material based on the transmitted signals (i.e. determining the level of a substance in a tank, C3 L14-19);
- ordering additional raw materials, from a pre-selected vendor, based on the existing quantity of raw materials (i.e. a controller automatically ordering additional resources when levels are deemed to be low, C6 L13-25);
- providing a transport vehicle to deliver the additional raw material from the pre-selected vendor to the manufacturing site and having the additional raw materials delivered to the manufacturing site whereby the additional raw materials are supplied before the existing quantity of materials, at the manufacturing site, has been depleted (i.e. Abstract and inherent to the disclosed capabilities of Ferretti since this is precisely what Ferretti is used for, that is, to avoid complications resulting from low levels in a tank (e.g. "tank running dry", C1 L29-39) by forming a system that monitors the tank remotely and allows for deliveries to be scheduled when supplies, within the tank, fall below predetermined acceptable levels).

As per claim 17, although Ferretti teaches the determination of usage levels over defined time windows, Ferretti does not teach the time windows being representative of the future, in other words, for projecting the usage, or levels, of the materials in the future based on past information and then using this information for the subsequent ordering of additional raw materials (e.g. chemicals).

Duenas teaches a remote monitoring method and system for monitoring the levels of containers (i.e. C1 L10-17) wherein information regarding usages are projected, via predictions, in order to more effectively schedule future deliveries of materials stored in the containers (e.g. liquids)(i.e. C2 L25-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the teachings of Duenas into the system disclosed by Ferretti since both inventions are related to analogous art in that they are both directed towards remotely monitoring the levels of liquids in storage containers and for the purpose of allowing for future usage of liquids to be taken into account, based on past usage, which therefore results in a more flexible and accurate inventory monitoring system since the system is no longer purely reactionary, meaning reordering or deliveries no longer are only in response to current levels,

but are also in response to ever changing usage requirements, and this would provide Ferretti's system with a more powerful, and significantly more accurate way of maintaining liquid levels of remote storage containers, and this would have been obvious to one of ordinary skill in the art at the time the invention was made.

As per claim 18, Ferretti teaches displaying the determined existing quantity of raw material on the central computer (i.e. C4 L39-42).

5. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferretti et al., U.S. Patent No. 4,788,648, in view of Carlin et al., U.S Patent No. 4,487,065.

As per claim 19, Ferretti does not specifically teach an alarm being visual or audible in nature or level signals being generated by using ultrasonic level detectors.

Carlin et al. teaches both of these concepts within the confines of a remote monitoring system for monitoring the levels of materials inside storage containers, wherein the levels are detected using ultrasonic detection means and when the levels are not acceptable, for whatever reason, an alert is sent to a remote computer (i.e. C3 L5-13 and C4 L42-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an alarm feature and an ultrasonic level detecting means since firstly, the alarm means would provide a way that a remote operator would be able to easily ascertain whether the current levels within the containers are acceptable or not and whether the levels have or are reaching critical levels and secondly, the use of an ultrasonic level detecting means would provide a very accurate way of measuring the levels within the container, and this would have been obvious tone of ordinary skill in the art at the time the invention was made.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald D Hartman Jr. whose telephone number is 703-308-7001, and after October 12, 2004, (571) 272 - 3684. The examiner can normally be reached on Mon. - Fri., 11:30 am - 8:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703-308-3179, and starting October 12, 2004, at

(571) 272 - 3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronald D Hartman Jr.
Examiner
Art Unit 2121

Anthony Knight
Supervisory Patent Examiner
Group 3600